

6.

Muscular

Sexual

&
(Part of)

Mental Hygiene.

(Other notes better here)



[Faint, illegible handwriting, possibly a signature or name, visible through the paper.]

does not perspire, the kidneys secrete more than on a hot day.

The next subject is the

Hygiene of the Motor Apparatus.

The muscles & bones comprise the ~~motor~~ apparatus.

The ^{conditions} ~~laws~~ of ^{health} nutrition are:

1. Sufficient supply of blood.
2. Good quality "
3. Sufficient innervation
4. " exercise
5. " repose.

A sufficient supply of blood is necessary. If a clot of ~~blood~~ stops up an artery in the brain, that part of the brain ~~may~~ be paralyzed.

There must be innervation. If we cut the nerve of a limb of an animal, the muscle will be paralyzed.

Holding the arm over a chair will illustrate this temporarily.

A person may have good muscles and poor nerves.

& Heenan's second fight in England.

Winthrop's first lecture.

HYGIENE OF THE
MOTOR
SYSTEM.

LAWS OF
NUTRITION.

SUPPLY
OF BLOOD.

INNERVATION

~~P. W. Mummy, 1875, Captain Webb~~

in England swam 20 miles in about 5 hours. ^{Afterwards swam across the Channel!}
 Coyle (Irish birth) and Johnson (English) ^{undertook to} swim, same year,
 a match of 13 miles in the Delaware river. Both gave up ^{(3 miles short).}
 Coyle is said to have swum a mile in 10 minutes.

Capt. Boyton's feat, crossing the Br Channel, was floating and
 paddling; still, a very remarkable exploit. (1875).

End of 24th Lecture, 1869.

~~Rowing~~

~~Eames~~

~~Reinfort - died suddenly,
 giving way - owing a race~~

X but overdone in the contests between
 Off. Cambridge & Harvard Males
Breaks down some young men almost every year

EXERCISE.

Exercise is necessary for health. The circulation and aeration of the blood ~~and~~ not kept up without it.

It must not be excessive. ^{Prof. Jackson} Rupture of the heart or aorta, tendency of blood to the head, and general exhaustion may be thus produced.

Dr. Winship never goes to the stop of his strength. [His experience: -]

MODES OF EXERCISE.

WALKING.

RIDING

DRIVING

SAILING

FENCING

BOXING

DANCING

SKATING.

ROWING

Swimming

Modes of Exercise:

if enough of it.

Riding on horse

than walking. It

the muscles of the

Driving & Sailing

They are good for

Fencing & Box

Dancing is good

air. In a heated

Skating is excellent for

It is in the cold, open air where

there is plenty of oxygen.

Rowing is a rule of hygiene, that

the most common pleasant exercise,

elements he believes himself to have received from my simple preparation, in the hope that he may thus contribute to the benefit of others.

I do this the more readily in regard to Hooiland's German Bitters, prepared by Dr. C. M. Jackson, of this city, because I was prejudiced against them for many years, under the impression that they were chiefly an alcoholic mixture. I am indebted to my friend, Robert Shoemaker, Esq., for the removal of this prejudice by proper tests, and for encouragement to try them when suffering from great and long continued debility. The use of three bottles of these bitters at the beginning of the present year, was followed by evident relief and restoration to a degree of bodily and mental vigor which I had not felt for six months before, and had almost despaired of regaining. I therefore thank God and my friend for directing me to the use of them.

J. NEWTON BROWN, Phila.
From the Rev. Thomas Winter, D. D.,
Pastor of Roxborough Baptist Church.

Dr. Jackson—Dear Sir: I feel it due to your excellent preparation, Hooiland's German Bitters, to add my testimony to the deserving reputation it has obtained. I have, for years, at times, been troubled with great disorder in the head and nervous system. I was advised by a friend to try a bottle of your German Bitters. I did so, and have experienced great and unexpected relief; my health has been very materially benefited. I confidently recommend the article where I meet with cases similar to my own, and have been assured by many of their good effects.

Respectfully, yours,
T. WINTER, Roxborough, Pa.

READ THE FOLLOWING.

Following well known reverend gentlemen writing the great benefits

(Enlarge)

exhilarating

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 a match of 13 miles in the Delaware river. Both gave up
 Coyle is said to have swum a mile in 10 minutes. 3 miles short.

~~Capt. Boyton's feat, crossing the Br Channel, was floating and
 paddling; still, a very remarkable exploit. 1875.~~

~~End of 2nd Lecture, 1869.~~

EVIL EFFECTS OF EXCESSIVE PHYSICAL TRAINING.—There is no rose without a thorn; and one of our physicians has something to say on the late boat race. He remarks that there is not amongst these crews a single man henceforth with a sound organization; and one who has lived for years at Motlake says there is not one who will not die so many years sooner by so much effort performed beyond his natural powers—not two, probably, that will reach the age of 45—not one that, notwithstanding all the idle nonsense of the “trainer,” will not be a disabled man from the fatal day he got into the hands of trainers and boatmen. Seven such cases have fallen under his observation. Foolish people say these “sports” are the backbone of English pluck; but the whole assumption is a melancholy falsehood. We hear of the great prevalence of heart disease of late years, and stand aghast at the sudden deaths from that cause. Who can deny that there is truth in this? It is to be hoped that there is some exaggeration in the doctor's remark. We know that they like to frighten with death's heads and stuffed alligators; but the experience of most of us tends to show that over-exertion, combined with excitement, frequently has injurious, if not fatal effects.—
 Court Journal.

Rowing

Exerc

Refrost - died suddenly,
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MODES OF EXERCISE.

Modes of Exercise:- Walking is good if enough of it.

WALKING.

Riding on horse takes less time than walking. It does not develop all the muscles of the legs.

RIDING

DRIVING

SAILING

Driving & Sailing are passive. They are good for invalids.

FENCING

BOXING

Fencing & Boxing are ^{an exercise.} very good.

DANCING

Dancing is good if in the open air. In a heated room it is not.

SKATING.

Skating is excellent for both sexes. ^{The moral advantages of it does not belong to our province.}

ROWING

It is in the cold, open air where there is plenty of oxygen. ^(Enlarge)

Swimming

It is a rule of hygiene, that the most ~~common~~ pleasant exercise, ^{rejuvenating}

Chinese ^{mandarin} remark on ^{seeing English gentlemen} a game of base ball -
 "we always pay people for amuse^{ment} in our country."

Games may be over-ardent; cricket has
 sometimes injured the heart. The game that is most
 innocent of this (unless in the Sentimental sense) is Croquet.

* "Constitutionals" may be dreary: e.g. some
 boarding school drills, in line or set hours.

The Health Life

See my Personal Exercise notes here →

✱ Hamerton, in his book on the "Intellectual Life",
 shows that a good deal of bodily activity is compatible
 with the best kind of literary labor. Sir Walter Scott
 was much on horseback, and he and the poet Words-
 worth were both great walkers. Goethe, too, delighted
 in riding, swimming, walking and skating. Isaac Walton's
 fishing rod is famous;— and so, in our own times, has become
 Tyndall's Alpenstock; as well as Charles Kingsley's ram-
 -bles by the sea-side, and in the forests of the tropics.

other things being equal

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Treadmill work e.g.
If we could utilize
game efforts, great force.

GAMES

is the most beneficial. Games: cricket, ^{foot ball} baseball, &c. are ~~very~~ good. It is astonishing what hard work we will perform if we are enjoying ourselves.

HUNTING

EXCURSIONS

FISHING

DUMB BELLS

Hunting, natural science excursions, & even fishing are good on account of the enjoyment.

As a last resort we should use the dumb-bells: better than nothing, decidedly.

EFFECT
OF EXERCISE
ON
DIFFERENT
ORGANS.

RESPIRATION.

Effect of Exercise on Different Organs:—
It ~~increases~~ ^{See my own notes here.} the amount of air breathed. For exercise, the chest should be untrammelled. The air should be pure. Dr. Winship was very particular about the air. There should be a sufficiency of carbonaceous food.

HEART.

It accelerates the action of the heart and bloodvessels.

SKIN.

It increases the ^{warmth} perspiration & vascularity of the skin. During exercise, we can stand more exposure.

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End of 25th Lecture

MUSCULAR
PERFORMANCE

Muscular Performance.

Maximum — 723 tons lifted 1 foot
in 12 hours.

Average — 300 tons lifted 1 foot daily.

Minimum for healthy adult — 150 tons
lifted 1 foot daily; equivalent to a
walk of 9 miles.

MARCHING,

In Marching

Slow time — length of step, 30 inches.

Quick time — " " " 30 "

Double — " " " 36 "

Average — 2.8 miles per hour.

Daily average — 12 miles.

EFFECTS OF
EXCESSIVE
HEAT.

From Excessive Heat.

Sun-stroke; — congestion of brain.

Heat-collapse; — prostration, from
devitalization of the blood and
nerve-centres.

EFFECT
ON MUSCLES.

In regard to the muscles, exercise first wastes & then renovates. A certain chemist says that the soreness of the muscles is caused by the formation of lactic acid.

ON
NERVES.

It favors the ^{balance of the} nervous system. Aerobats are said to be stupid. This may be so, in those who do nothing but exercise.

Lecture XXV.

OMISSION
PAGE-183.

[In the last lecture, stewed prunes should have been mentioned as good for increasing the action of the bowels.]

STEWED
PRUNES.EFFECT OF
ON THE PHOSPHORUS
METAMORPHOSIS OF
TISSUE AND
ON ELIMINATION.

Exercise increases the metamorphosis of ^{stop} tissue, and elimination; hence there must be a good supply of water. Hard working men are often thirsty.

MAN'S POWER.

AVERAGE
&
MAXIMUM
POWER.

Amount of Exercise which can be Taken:—
A man's power, is ^{of a day's labor} $\frac{1}{17}$ % of a horse power. The average is 300 tons lifted 1 foot; 400 tons is a hard day's work. The maximum is 723 tons. In India, the Coolies run

with a weight, on an ascent, 10 miles a day. Turkish porters carry 600 pounds at once.

When a man walks on a level, he lifts $\frac{1}{20}$ of his own weight.

Daily ~~exercise~~^{exercise}, out of doors, should be from 150 to 300 tons, 1 foot; equal to a walk of 9 miles. For soldiers 12 miles is a good average ~~day's~~ march.

Gymnastic training was introduced into the British army.

Gymnastics are of two kinds; the heavy & the light. The former were introduced into the United States, by Dr. Beck, in 1825.

The light system is associated with Dio Lewis, although Ling, a Swede, practised it before he did.

In a ^{the Public Training} school for imbeciles in 1856 a system of light gymnastics was contrived by an idiot: methodical, ^{by notation,} keep time.

Calisthenics (beauty & strength) the name of the new system, has many advantages. A social

WALKING
ON A LEVEL.

GYMNASTICS
IN
THE ARMY.

HEAVY
GYMNASTICS

LIGHT
GYMNASTICS.

ADVANTAGES
OF
CALESTHENICS.

Harvard crew quite probably lost their boat race against
 the Oxford men in England by making too many strokes
 (42) in the minute. ^{Oxford made 40 strokes.} Cambridge beat Oxford 1870, first time
 for several years, on 38 strokes in the minute - steady pulling.
 1875, Oxford beat Cambridge with 36 strokes to the minute.
 Similar difference gave Columbia College victory at Saratoga, 1874.
 Columbia College crew 34 to 35 strokes per minute,
 quick hard pull & rather slow recovery.
 1876, Cambridge beat Oxford -
 both averaging 37 to a minute.
 Oxford varies from 35 to 40.

Sketch Windship's victory. He fainted when about to
 commence his first lecture.
 (Resurrection of the dead)

End of 26th Lecture
 Dr Davis

element is introduced, there is a variety of ^{easy} movements, and grace in form & motions is developed.

DR. LEWIS.

Dr. Lewis says that in a short time he can by his system, tire a heavy gymnast.

MOVEMENT
CURE.

The movement cure is on the principle that passive exercise is better than none. Dr. C. F. Taylor of New York.

MODERATION.

Moderation is to be practised, even in the heavy gymnastics. Dr. Winship says that the result of training is

Sergt. Collins.....	29	Corp. Wom.....	26
Sergt. Youmie.....	29	Corp. Kehoe.....	20
Capt. Fagin.....	36	Corp. Clancey.....	30

The above-named marksmen subsequently shot for marksmen's badges, of which two qualified in each command.

HARVEST PROSPECTS.

A circular issued by the McKillop & Sprague Co. gives the following report of harvest prospects: In the Counties of Boone, Cross, Pope, and Lawrence, of Arkansas, wheat is not doing as well as usual; corn is very good, and on the whole the promise is very fair. Twelve other counties report an increased area under cultivation, and though the yield is below the average the quality is superior; oats, not an average; apple crop good, but other fruits a failure. In Kansas wheat is excellent, being above an average both in quantity and quality; corn in good condition, and a full crop; flax, hemp, and grass, all in good condition; only one county reports injury to the wheat by worms. All reports from Texas concur in representing the wheat crop as good; corn and cotton good, and up to the average; oats, pretty nearly a full crop. Nebraska reports the wheat crop thin because of cold weather, but with these exceptions favorable accounts are given of all cereal crops; as grasshoppers have not appeared, the farmers are in good spirits. In Florida corn is very good; cotton looks well, but it is too early to give an opinion respecting quantity and quality. The orange crop is doing well.

DR. WINSHIP.

Half an hour of Dr. Winship's pounds. He has which enables his muscles into

TRAINING.

The light system Training:— formerly held in ing, such as pu

In training, observed, are plain good, performance,

9 lbs 1
prime
grain

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 both averaging
 37 to 38 strokes per minute;
 Oxford varying from 35 to 38.

The Yale men have
 won in twenty minutes and two seconds. Harvard
 crosses the line thirty-one seconds later. Thus fin-
 ishes a race which will have the greatest effect upon
 rowing in the United States.

It is safe to say that no Harvard crew will hence-
 forth follow any out-dated prophet like the one who
 has been giving so much time and trouble to what
 he probably now finds a thankless task. The
 whole affair has been managed, moreover, in
 the most amicable manner. In spite of
 the alarming symptoms of bad feeling between the
 crews discovered by an imaginative reporter, the
 truth remains that the men have interchanged
 visits, that they have been polite to each other and
 to outsiders, and that after the race, while paddling
 up, they stopped and cheered each other with cor-
 diality. The privileged voyagers upon the swift
 steam launch report that Harvard caught the
 water first, but Yale did more execution, and took
 the lead. This she rapidly increased during the
 first mile, rowing thirty-three to Harvard's thirty-
 seven to the minute. She passed the mile bridges
 fully six lengths ahead. Lower down her coxswain,
 who had done better than the other steersman,
 on the first mile, got into the edge of the dead water,
 and the Harvard boat came up a little under a spurt.

He fainted when about to
 commence his first lecture.
 & exhibition of strength!

Lecture

Rowed June 30/76
 Springfield

element is introduced, there is a variety of ^{easy} movements, and grace in form & motions is developed.

DR. LEWIS.

Dr. Lewis says that in a short time he can by his system, tire a heavy gymnast. ^o

MOVEMENT
CURE.

The movement cure is on the principle that passive exercise is better than none. Dr. C. F. Taylor of New York.

MODERATION.

Moderation is to be practised, even in the heavy gymnastics. Dr. Winship says that his strength is the result of training only. ⁺

DR. WINSHIP.

Half an hour ^{at a time, extending to 1 hour} is enough exercise. Dr. Winship now lifts nearly 3000 pounds. He has a frame-work which enables him to bring all his muscles into action. ^X

TRAINING.

The light system is good for invalids. Training:— Erroneous ideas were formerly held in regard to training, such as purging, sweating, &c. In training, the things to be observed, are plain food, temperance,

^ Weston (May, 1870) walked, in New York,
100 miles within 22 hours. It had been done within 24
hours about a year ago by another man in this country. In June 1871,
he walked ^{400 miles in} 5 days.

D. A. Hunt found, while he was performing
of 1870,
the extraordinary exploit, a very large increase
in the amount of urea (and the urates) excreted.

In May, 1874, Weston attempted to walk
500 miles in 6 days;
he accomplished 430
within that time.

[End of 25th Lecture, 1869.]

considerable regular exercise, with

cleanliness, pure air, no tobacco, and not too soft a bed. Ten hours are allowed for sleep, and four for meals & rest.

REST.

Rest is necessary. We sometimes hear of a man walking 1000 miles in 1000 hours. Such a task would be difficult ^{only} on account of the want of rest.

ROBERTSON'S
SYSTEM.

Mr. Robertson's system is: breakfast (beef or mutton) at 8 o'clock, A.M. dinner (cutlets, roast, crackers) at 2 o'clock, supper (cold meat, biscuit) at 8 o'clock P.M.; exercise before each meal; and 7 hours sleep on a hard bed.

Hygiene of
MARCHING

much

Marching:— The soldier's dress is lighter now than formerly. Soldiers now march except on parade.

LENGTH
OF
STEP

The English slow & quick quick, 36 inches is the most common

Mr. T. Stewardson J^r

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within that time. [End of 25th Lecture, 1869.]

O'Leary, "American," in
March, 1878, in London,
walked ^{over} 320 miles in 6
days.

Weston, 1879,
walked 550 miles
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Hygiene of MARCHING.

much

Marching:— The soldier's dress is lighter now than formerly. Soldiers now march ^{almost} disconnectedly except on parade. French towards from Italy—

LENGTH OF STEP

The English march slow & quick time, 30 quick, 36 inches. This is the most common.

workman, holding in his hand a piece of wood, which is covered with wet sand, causes this to rub with the necessary degree of force against the inner surface during the rapid revolution of the glass. Ornamental figures placed on articles of glass ware are produced by compressing a portion of glass in a mould, and then they are attached to the article. These designs are usually raised, and they have an advantage over engraving by retain a polished and sharp

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(500 miles in 6 days; he accomplished 430
within that time)

[End of 25th Lecture, 1869.]

O'Leary, "American," in

O'Leary, the pedestrian, accomplished
his walk of 500 miles at the American In-
stitute in 143 hours, 17 minutes and 35 se-
conds. He had undertaken to walk the 500
miles in 144 hours, and beat time by 42
minutes, 25 seconds. He started on Mon-
day morning at 3 minutes after 12 o'clock.
He rested on Monday, 7h., 22m., 12s.; on
Tuesday, 6h., 37m., 47s.; on Wednesday,
6h., 10m., 6s.; on Thursday, 6h., 21m., 58s.;
on Friday, 6h., 28m., 13s.; and on Saturday,
3h., 43m., 22s. Th

London,

in 6

1879,

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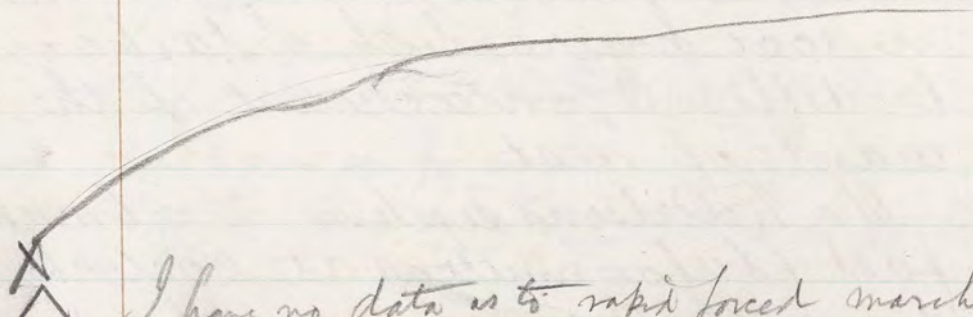
Hygiene of
MARCHING.

much

Marching:— The soldier's dress is lighter now than formerly. Soldiers now march ^{almost} disconnectedly except on parade. French Romans from Italy—

LENGTH
OF
STEP

The English marching step, is: slow & quick time, 30 inches, double quick, 36 inches. The quick time is the most common.


 I have no data as to rapid forced marches in the late war against rebellion. But Sherman's march across the country, ~~which was~~ the fatal blow which virtually ended the war, is understood to have been one of the most extraordinary ~~campaigns~~ ⁱⁿ of history. It was, there, as in the case of a number of the battles of the war, - not one day's work only, but the continuity of the process that was remarkable. The ~~physical and moral~~ ^{perseverance} endurance of Americans has been now proved to be unsurpassed. It is, perhaps, more a mental than a physical trait. This was especially conspicuous in the rebels of the South; of whom I saw a good many as prisoners at Gettysburg, after the battle - and the wonder was how they could fight so hard & so long.

FRENCH STEP

The French step is 28 inches. European soldiers are very small.

PRUSSIAN
AND BAVARIAN.

The Prussian & Bavarian step is 30 inches. The average of man's steps is 28 inches. In carrying a weight, it is less.

~~The average length of a ^{day's} march, is 12 miles. In forced marches 25-40 miles are sometimes walked.~~

FRENCH
AND SPANIARDS.

The French & Spaniards are better walkers than the English.

FORCED
MARCHES
IN INDIA

In India, 3^d British regiments marched 56 miles in 24 hours; another 42 in 20 hours, part in the sun; two companies, 195 miles in 9 days.

Long forced marches injure the troops. Heat-stroke is common.

SUN STROKE.

~~Heat~~-stroke is of two kinds: 1st. sunstroke caused by the direct-action of the sun on the head, producing congestion; 2nd. heat-collapse. This often occurs in the shade. It is an affection of the blood all over the system. It is much most frequent in cities.

HEAT-
COLLAPSE.

UMBRELLA.

The head should be protected. Even an umbrella is not out of place. A white handkerchief is more efficient.

ROBT. JACKSON.

Robt. Jackson limits a march to 14 miles a day.

SLOW
TIME.

Some officers do not approve of slow time. They say it fatigues.

RULES FOR
CARRYING
WEIGHTS.

Open order is better than close.

In carrying a weight, we should take care that; 1st. the lungs be not interfered with, 2nd. the weight be over the centre of gravity, 3rd. properly distributed & 4th. no blood vessel be pressed.

The best places for weights are the head, shoulders, & hips.

BALANCE.

Balance is important. It is easier to carry two small buckets than one large one.

CYLINDRICAL
KNAPSACK
AND HOLLOW BELT.

Dr. Parkes prefers to have the knapsack, a cylindrical valise. He says that the ammunition should be kept in a hollow belt.

Bad dress is the main reason

X
^ Extreme views on the subject; - Sabbatarianism.

Even the Jewish law admitted, most wisely, of certain
needful exceptions. Some few persons now, — as once
in Puritan New England, were even more rigid. This
is an injurious error.

Sunday cars — eng 4 hour.

Hygiene of the Bony System.

of the heart & lung diseases of the British army.

REST
ON
SUNDAY.

In relation to exercise we should remark that rest is required one day in seven. Experience justifies this. In the French Revolution they tried to do without Sunday, but found it impossible.

HARD PARTS
GOVERNED BY
THE SOFT.

Bones. It is a law of our bodies that the hard parts are formed by the soft. Thus the skull is governed by the brain. In a museum in England, there is the skull of a child who died of dropsy. It was larger than any adult's. In atrophy of the brain, the skull thickens.

BRAIN.

So the muscles of inspiration govern the chest.

CHEST

By exercise we may develop even the bones. Stationary calisthenics is very effectual for round shoulders & lateral curvature. I've noticed school girls in low

STATIONARY
CALESTHENICS.

I have other better notes

On Sexual Hygiene;

so these need not be

copied, from p. 205

to p. 215

SCHOOL GIRLS.

necked dresses, we will see one shoulder ~~protrude~~ protrude. This is caused by bad positions.

HYGIENE OF THE REPRODUCTIVE SYSTEM.

The next subject is the

Hygiene of the Reproductive

Comparing man with other animals, we find that there is less periodicity in

the male, the menstrual periods are the nearest to it has been x

male there is the ^{high of the} productive or necessary to life. primary glands spring is developed.

action of these organs is under certain conditions conditions are furnished image only.

reproductive system is the lowest organism of our It requires elaborate preparations

A man died in Kansas in 1871, native of Canada, a hunter & guide, aged 134 years.

Mortality of General Hospital of Vienna, 1869, 12.6 per cent.

A case of puberty at 4 years of age is reported by Ad. Menzel, cited in Phil. Med. Times, Aug. 1, 1871.

Don't copy from 20 to 30. More must marry under 30. Large children than those who marry later or earlier; but many these the perfect fertility (i.e. men - mental children) is open over 30. In medicine's studies.

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End copy

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HYGIENE OF
THE REPRODUCTIVE
SYSTEM.

Hygiene of the Reproductive Organs:-

Comparing man with other animals, we find is less periodicity in the female, the menstrual charges are the nearest

Lately it has been seen in the male there is the tendency

action of the

The reproductive system is not necessary to life. The mammary glands are not until offspring is developed.

The action of these organs is normal under certain conditions which conditions are furnished by marriage only.

The reproductive system is the most elaborate organism of our bodies. It requires elaborate preparation.

Don't copy! Don't copy! Don't copy!
More must marry under 30
before children than those who
marry later or earlier; but many
these the greatest fertility (i.e. not
-menstrual children) is observed
30. In menopause's children.

PERIODS.

NOT NECESSARY
TO LIFE.

ELABORATE
ORGANISM.

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I have other better notes

On Sexual Hygiene;

so these need not be

copied, from p. 205

to p. 215

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SCHOOL
GIRLS.

necked dresses, we will see one shoulder ~~prods~~ protrude. This is caused by bad positions.

The next subject is the

HYGIENE OF
THE REPRODUCTIVE
SYSTEM.

(Skip 215)
PERIODS.

Hygiene of the Reproductive Organs:- Comparing man with the lower animals, we find that there is less periodicity in him. In the female, the menstrual discharges are the nearest approach.

Lately it has been stated that in the male there is the same tendency.

NOT NECESSARY
TO LIFE.

The ^{action of the} reproductive organs ^{is} are not necessary to life. In the female the mammary glands are inert until offspring is developed.

The action of these organs is normal under certain conditions which conditions are furnished by marriage only.

ELABORATE
ORGANISM.

The reproductive system is the most elaborate organism of our bodies. It requires elaborate preparation.

Sexual Hygiene.

Sexual Hygiene.

1. Functional action of the reproductive organs is not necessary to the individual.
 2. No harm results from the inaction of those organs.
 3. Sexuality is physiologically healthy and safe only in marriage.
 4. The married state is, as a rule, more favorable to health than that of celibacy.
 5. Abnormal sensuality is injurious in proportion to:
 - A. Prematurity.
 - B. Deviation from naturalness.
 - C. Frequency & amount of indulgence.
 6. Such excess may induce paralysis, epilepsy, insanity, disease of the heart, or general nervous debility.
 7. Hygiene furnishes no justification of prostitution; but approves ^{of the} mingling of the sexes in ^{refined} society.
 8. To be chaste in life, it is needful to be pure in thought and feeling.
- (Ethics-philosophical Maxim:
To pursue pleasure for itself is to exterminate happiness.)

ABUSE.

Its purpose is the propagation of the race. Its abuse leads to more serious results than the abuse of any other organ does.

Lecture XXVI.

PREMATURITY.

Prematurity affects the injury resulting from morbid sexuality. A man is not ^{fully} ^{formed} fitted until he is 21 at least; a woman, at 20. There is a case of a girl having a child before she was eleven. The father was only 15. This is an extreme case. In the East they marry from 12 to 15 yr old. [^]

NATURALNESS.

The use of these organs is safe according to its naturalness. The married state is best. The further the deviation, the greater the injury.

DISEASES.

Disturbance of the heart & nerves, and special diseases may be caused.

EXTENT OR FREQUENCY.

The extent or frequency of the use has an effect. In married life, once in two weeks, is enough: ^{his in septim dies, the maximum.}

The minor effect of the morbid use may be seen from two examples.

EXAMPLE

A man crossed the ocean in the company of two females between whom, he divided his time. He became a paralytic.

EXAMPLE.

A soldier in the hospital, ^{convalescent from typhoid fever,} visited a woman and became paralytic.

Sexual coitus is a physiological act. Self-abuse, mere mechanical excitation is injurious.

CIRCUMCISION.

Circumcision is hygienic

It is exceedingly difficult to restrain oneself. ^{Sargon} Solomon was ~~over~~ thrown by a woman. The Trojan war was caused by a woman. Anchorites find that in leaving the world, they are still in danger.

MARRIAGE, OR
A REGULATOR.

Every man should be his own master. If he is not, he is a brute. Marriage is the great regulator of sexual indulgence.

INFLUENCES
OF THE
REPRODUCTIVE
ORGANS

There are two influences which affect the condition of the reproductive organs, viz: habit, and the encouragement of thoughts. For those under

See under Public Hygiene
the contrary of all this.

When it does, it is owing either to previous habits, or to
indulgence of sexual thoughts & emotions.

June 7, 1873]

MEDICAL

heart which I believe to be present; and on this account I have reserved the following results of their more careful examination until this time.

(To be continued.)

ORIGINAL COMMUNICATIONS.

—the *Rhyloides martinicensis*— which does not undergo the ordinary tadpole transformation, but is fully formed *in ovo*. On examining an ovum taken from the gelatinous mass in which they lie embedded under moist leaves, there is found a slender embryo with a large head, four styliform limbs, and a tail folded in. On touching the egg, the embryo changes its place. A day later, the embryo has a tail as long as its body, translucent and flat, like a tadpole's tail. The limbs then become developed, and some days later the little frogs escape, being of a deep brown-gray color, and not presenting the least vestige of a tail.

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ly life, the less the tendency
to morbid sensuality. If boys &
girls could see, & play with each
other, they would be much happier.
The society of the other sex, el-
evates each.

There is no hygienic support for
prostitution. Continence, though rare
is not impossible. When it is prac-
tised seminal plethoria ^{not} often occurs.

HIGH RELATION
OF THE
SEXES.

TEST OF
CIVILIZATION.

INTERMIXING
OF THE
SEXES.

PROSTITUTION

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L TIMES.

[June 7, 1873]

dred and thirty-five women between the ages of seventeen and thirty-one, who were known to have commenced immoral practices, gave up that course of life upon being spoken to by the police; and the Assistant-Commissioner's Report contains individual instances of many girls and married women who owe their rescue from a life of sin and misery to the well-directed and humane efforts of the officials engaged under these Acts."

See under Public Hygiene
the contrary of all this

When it does, it is owing either to previous habits, or to indulgence of sexual thoughts & emotions.

The success of the operation is, therefore, as now—at the end of six months—he has a comparatively useful limb, shortened slightly, but with a little motion in the joint, and fitting him for employment in many vocations.

I have been succinct in the account of this case, as there was not anything peculiar about it, and the only purpose I have to subserve in its publication is to offer the encouragement which a successful operation may afford to the profession.

MAY 27, 1873.

BATRACHIAN METAMORPHOSIS WITHIN THE OVUM (*British Med. Journal*, May 3).—M. Jules Garnier, the explorer of New Caledonia, makes known through the *Revue Scientifique* an observation of M. Davay, pharmacien in Guadeloupe. It is to the effect that in the country there is a frog—the *Hylodes martinicensis*—which does not undergo the ordinary tadpole transformation, but is fully formed *in ovo*. On examining an ovum taken from the gelatinous mass in which they lie embedded under moist leaves, there is found a slender embryo with a large head, four styliform limbs, and a tail folded in. On touching the egg, the embryo changes its place. A day later, the embryo has a tail as long as its body, translucent and flat, like a tadpole's tail. The limbs then become developed, and some days later the little frogs escape, being of a deep brown-gray color, and not presenting the least vestige of a tail.

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HIGH RELATION
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We quote from the *Lancet* for May 10 the following statements, which, in our opinion, are worth volumes of theoretical opposition: 1873

"It (the report) states that the women in the several places subject to the Acts attended with regularity throughout the year, and that in a few instances only was it necessary to take proceedings before a magistrate. The Acts have exercised a repressive influence in several ways. Notwithstanding, we are told, the continued influx of common women from unprotected districts, the total number in the several districts on the 31st of December last had been reduced. The beneficial working of the Acts is, however, more clearly demonstrated by the reduction in the number of juvenile prostitutes; and this is very striking. The number of prostitutes in the different districts under the age of seventeen on the 31st of December last was nine; whereas in 1866, when the Acts were first put in force, there were three hundred and seventy-seven under that age. Again, on the 31st of December last, those under the age of eighteen were sixty-seven; whereas in 1866 there were five hundred and ninety-five! The number of brothels has been reduced by eighty-six during the past year, many of those suppressed being of the lowest description: seventy-one young creatures between the ages of twelve and seventeen, and one hun-

See under Public Hygiene
the contrary of all this.

When it does, it is owing either to previous habits, or to indulgence of sexual thoughts & emotions.

and for those who have not opportunity to marry;
age, the less they think of such
things, the better.

HIGH RELATION
OF THE
SEXES.

The relation of the sexes is not
merely organic. The relations of moth-
er & son, father & daughter, and
brother & sister, best explain this.
We do woman an injustice if we
think of her as an object of sexual
desire only.

TEST OF
CIVILIZATION.

The highest test of civilization
is the good standing of woman.

INTERMINGLING
OF THE
SEXES.

The intermingling of the sexes at
an early age, should be encour-
aged. The freer they are, from ear-
ly life, the less the tendency
to morbid sensuality. If boys &
girls could see, & play with each-
other, they would be much happier.
The society of the other sex, el-
evates each.

PROSTITUTION.

There is no hygienic support for
prostitution. Continence, though rare
is not impossible. When it is prac-
tised seminal plethoria ^{not} often occurs.

End of 26th Lecture, 1869—

PARIS.

There is no need of prostitution
In Paris it is licensed under the
plea that it cannot be stopped.
This does not lessen its amount.
Syphilis is very common in Paris.

LONDON.

In London, vice is more open.

There it is called "the great social
evil".

OTHER
LARGE
CITIES.

In all the large cities of Europe
and even in America it is common.

The main preventives are so-
cial and educational, not mu-
nicipal.

SYPHILIS.

The origin of syphilis is not
known. It was first described in
Europe in the 13th century. The
Italians called it the French
disease & so each accused some
other nation when finally they
agreed to charge America.

LEPROSY.

It appeared when leprosy dis-
appeared. It taints the blood and
burns the skin.

There are two minor questions

* Dr. Echeverria of N.Y. (Phil. Med. Times)
Nov. 1872

assents the absence of antaphrodisiac power in
bromide of potassium in
epileptics, on whom he tried it extensively.

Digitalis is said by some to have this effect.

End of 27th Lecture. x

menstruation, of

Hygiene of married life: Storer, -

& Goodell; &c.

[space, 1 page]

connected with this subject.

WILL DRUGS
CONTROL
DESIRE?

1st. Will any drugs control venereal desire? It is doubtful. If any, lupulin & bromide of potassium will.*

Fatiguing muscular exercise, is good. Sleep, without excess of cover, & not too long, & moderate eating, especially at night, also.

INVOLUNTARY
EMISSIONS.

2nd. What is the importance of involuntary emissions? If not more than once in two weeks, they show a healthy action of the organs. ^{not more} ~~X~~ ~~X~~ ~~X~~

INHERITANCE

EFFECT
ON MARRIAGE.

Influence of Inheritance on Offspring
There is no doubt that certain constitutional diseases, as consumption, insanity & epilepsy, are inherited. They should make a marriage prohibitory.

There are degrees of liability to inheritance, but when the symptoms are plain, no marriage should be allowed.

Begin
again

INTEMPERANCE

Intemperance vitiates offspring.
The deterioration agrees with the
continuance of the habit.

EXAMPLE.

A man in the first part of his
marriage, was temperate, & had
4 children who were healthy. He
began to drink, and had 3 children
who were not healthy. Afterwards,
he reformed and had four more
healthy children.

BLOOD-MARRIAGES

In reference to marriages of con-
sanguinity, there was but one
view, until lately.

EFFECTS.

Deterioration of stock follows. Lately
some think this is exaggerated.

From 25 to 30 pr. ct. of deaf mutes
are born of parents ^(Bordin) who were ^{nearly} related.

Dr. HOWE.

Howe of N. England found a large
number.

(Berniss)

CASES
IN
KENTUCKY.

In Kentucky, of 833 such mar-
riages, 3942 children were born.
145 were deaf mutes, 85 blind, 308 idi-
ots, 38 insane, 66 epileptic, 98 deformed.
On the other hand. the Ptolemies

* Darm:

"Nature at loss self-fertilization."

PTOLEMIES.
OF
EGYPT.

of Egypt intermarried and produced intelligent offspring. Cleopatra was both handsome & intelligent.

DOMESTIC
ANIMALS

Among the domestic animals this is occurring continually yet there is no deterioration. ^{Pigeons & racehorses, etc.} Even among plants, "pedigree wheat" is thus produced.

HERMAPHRODITES

→ Parthenogenesis
Hermaphrodites occur among both plants and animals. They are exceptions to the law that opposition of sexes is necessary. Late investigations show that there is an occasional sexual union even in such cases.

LAW
OF
OPPOSITION

There is a law of opposition, a polarity of sexes, two things most alike having the least attraction.

FAMILY
TRAITS.

Those traits which are peculiar to the parents, are intensified in such unions. If a father & mother have consumption, the tendency is doubled in the child.

~~Hereditary diseases are not as common as might be expected.~~

#7

Hygiene of Pregnancy.

TENDENCY
TO RETURN
TO TYPICAL
THE STOCK.

MENTAL
HYGIENE

DIFFERENT
VIEWS.

MATERIALISM.

SPIRITUALISM.

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of the functions of the mind and the body of a human being consists of brain & body. Miss Martineau holds this view This is materialism

2nd. (Emerson's idea) That the mind is the only substance in the universe, that the human mind

all fixed or volatile oils. It dries very fast, and does not shine, unless mixed with resinous varnishes. It is extremely flexible, may be spread in very thin layers, and remains unaltered under the influence of air and light. It may be employed to varnish geographical maps or prints, because it does not reflect light disagreeably, as resinous varnishes do, and is not subject to crack, or come off in scales. It may be used to fix black chalk or pencil drawings; and unsized paper, when covered with this varnish, may be written on with ink.—*Journal Applied Chemistry.*

Longevity.

A question which has long been agitated and argued *pro and con* is, whether the work of the brain is injurious to health, and whether it shortens life. In relation to this subject, the Paris correspondent of the *Morning Star* notices that most of the clever men of France reach a great age. Of the members of the French Academy, M. Viennet is 89; M. de Ségur, 86; de Pougerville, 76; Lebrun, 82; Villemain, 76; Lamartine, 76; Flourens, 78; M. Guizot is 79, and M. Thiers 69; Berryer is 74; the Duke de Broglie, 82. The ages of the younger members of the Academy range from 60 to 70.

— RECOVERY OF PROF. TROUSSEAU.—Some of our cotemporaries were misled by the erroneous cable dispatch, announcing the death of Professor TROUSSEAU. One of them announces an obituary notice as in preparation, and so recently as the 1st inst., alludes to his death. We stated, several weeks since, that his illness was slight, and the *Union Médicale*, of Dec. 4th, says: "The friends of M. TROUSSEAU, and all our confrères, receive with entire satisfaction, the news of

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wages, without requiring any work for it. This was three years ago. The result of this philanthropic experiment has been the reduction of infant mortality in the district from 40 to 25. Six other houses have been so struck with the beneficial effects of M. Dollfus' system that they have resolved to adopt it, subject only to a modification—necessary, perhaps, in a commercial point of view, and wholesome as regards the independence of the workmen. Seeing the immense benefit to humanity produced by M. Dollfus' charity, they recommend to all their *employeés* to make themselves participants in the system by a subscription of three sous a fortnight from all women in their factories, between the ages of eighteen and forty-five years. The premium is insufficient to cover the risk, but the masters undertake to make up the difference.

An example so good in every respect is well worthy of imitation in other countries. We need not go to France for instances of children dying in their first year at the rate of 40 or even 50 per cent. Mothers are called away to work long hours in the field or the factory quite as soon after confinement with us as elsewhere, and their infants suffer from just the same causes as moved the kind heart of M. Dollfus.

The plan of establishing a fund from the contributions of the women themselves, to be available for the support of the mother during an enforced abstinence from her work, as being of the nature of an insurance, is certainly preferable to any scheme of mere eleemosynary help; and if the mention of M. Dollfus' success induce any of our employers of female labor to give the experiment a trial, we have little doubt that results equally satisfactory may be achieved.—*Lancet*, Dec 1, 1866, and *Med. News*.

ancey

METEOROLOGICAL.

December,	31.	J. 1,	2,	3,	4,	5,	6.
Wind.....	N. E.	N. E.	N.	N. W.	W.	W.	N. W.
Weather.....	Cl'dy.	Cl'dy.	Cl'dy.	Clear.	Clear.	Cl'dy.	Cl'dy.
Depth Rain.....							
Thermometer.							
Minimum.....	11°	12°	14°	3°	6°	7°	15°
At 8 A. M.....	23	29	24	15	18	20	37
At 12 M.....	25	31	27	24	32	38	39
At 3 P. M.....	25	32	28	25	32	39	38
Mean.....	21.	26.	23.25	16.75	22.	26.	32.25
Barometer.							
At 12 M.....	30.2	30.4	30.3	30.3	30.3	29.9	29.8
Germantown, Pa.	B. J. LEEDOM.						

Medical Society of the State of New York.

The Sixtieth Annual Meeting of the Medical Society of the State of New York will be held in the city of Albany, February 5th, 6th, and 7th, 1867. A full and interesting meeting is confidently expected.

516-18

WM. H. BAILEY, Secretary.

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TENDENCY
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MENTAL
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DIFFERENT
VIEWS.

MATERIALISM.

SPIRITUALISM.

Mental Hygiene.

Mental hygiene rests on the relations of the brain and mind.

The subject is a difficult one.

There are several views of the relation of the brain to the mind.

One is that the mind is the total of the functions of the brain and the if a human being consists of brain & body. Miss Martineau holds this view This is materialism

2nd. (Emersons idea) That the mind is the only substance in the universe, that the human mind

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Reduction of Infantile Mortality; French
Philanthropy.

The Paris correspondent of the *Daily News*, referring to the subject of infant mortality which has lately occupied the attention of the French journals, gives a striking illustration of the extent to which the excessive fatality of childhood may be reduced by proper attention to the requirements of nature. M. Jean Dollfus, one of the largest manufacturers in Alsatia, was shocked to find that the women employed in his factories lost 40 per cent. of their children in the first year, whereas the average mortality at that age in France is only 18. He came to the conclusion that a main cause of this frightful loss of incipient life was the necessity laid upon the mothers to resume work too soon after confinement, and therefore, with the true grandeur of a merchant prince, determined to pay every woman in his service, who was brought to bed, six weeks'

Not go to France for instances of children dying in their first year at the rate of 40 or even 50 per cent. Mothers are called away to work long hours in the field or the factory quite as soon after confinement with us as elsewhere, and their infants suffer from just the same causes as moved the kind heart of M. Dollfus.

The plan of establishing a fund from the contributions of the women themselves, to be available for the support of the mother during an enforced abstinence from her work, as being of the nature of an insurance, is certainly preferable to any scheme of mere eleemosynary help; and if the mention of M. Dollfus' success induce any of our employers of female labor to give the experiment a trial, we have little doubt that results equally satisfactory may be achieved.—*Lancet*, Dec 1, 1866, and *Med. News*.

TENDENCY
TO RETURN
TO TYPICAL
THE STOCK.

There is a tendency to return to the typical stock. Horses turned loose on the prairie get all alike. The true principle is, that nearly related persons (even as far as 3rd cousins) should not marry.

The danger is perhaps less if there is no resemblance. ~~TL~~

The next subject is

Mental Hygiene.

Mental hygiene rests on the relations of the brain and mind.

The subject is a difficult one.

There are several views of the relation of the brain to the mind.

One is that the mind is the total of the functions of the brain and the if a human being consists of brain & body. Miss Martineau holds this view. This is materialism.

2nd. (Emerson's idea) That the mind is the only substance in the universe, that the human mind

MENTAL
HYGIENE

DIFFERENT
VIEWS.

MATERIALISM.

SPIRITUALISM.

*^ Prof. Porter's view (On the Human Intellect)

that mind or soul is identical not with matter, but
with force. Carpenter seems to be about the
same, though less extended in its negations.

Comparative psychology might not to be
neglected. (See these pages at end of this vol.
of headformal notes)

a part of the universal divine Mind.

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is that which knows and thinks.
This is the opposite extreme, pure spiritualism.

ANECDOTE
OF
EMERSON.

When a Millerite said to Emerson that the world was coming to an end, he replied "very well, we can get along as well without it."

The first is the somatic view.
The second is the psychic view.

NILL
BUCKLEY'S
OPINION.

Buckley asserts that the mind is incapable of action, without the brain, that the study of the brain is the study of the mind.

BEST
VIEW.

The best view is that man is an animal, endowed, like the rest, with intelligence and emotional faculties, the organ of which, is the brain, the aggregate of which is the mind.

Dr. CARPENTER.

Dr. Carpenter asserts that brutes have minds.

We must either admit that the mind is immortal (animals hence being immortal)

in regard to Hygiene
we may consider

MENTAL
HYGIENE.

Mental Hygiene

As the brain is the organ of Mind,
mental action ^{as} is synonymous with
cerebral action.

Mental Health is affected by

1. Inherited cerebral organization.
2. Age: first instinctive, then emotional, last matured intellectual.
3. Physical Influences:

A. General Health

B. Air

C. Food & Drink.

D. Exercise

E. Sleep.

4. Mental Influences:

F. Civilization

G. Education

H. Intellectual Labor.

I. Excitement

J. Mental Stagnation

K. Sympathy.

End of 27th Lecture K69.

DIFFERENCE
BETWEEN
MAN
&
BRUTES

or we must refuse to admit it.

Man has more than other animals. The character of his brain is different. He has a spiritual nature. This is connected with conscience.

It is sound philosophy to speak of a nature common to man and brutes.

BIBLE
TESTIMONY.

This is shown by the bible. It uses two words, one to mean the nature peculiar to man, & the other to mean that which he has in common ~~with~~ brutes. This is seen in ~~the~~ passages.

Lecture XXVII.

ψυχῆς, τίς ἐστι

EXAMPLES
OF
THE DEPENDENCE
OF
THE MIND
ON THE
BRAIN.

The dependence of the mind on the brain may be illustrated.

A man wounded at Waterloo, had his head knocked in. While the bone pressed on the brain he had no consciousness. He recovered it as soon as the bone was raised.

RECEIVED
MAY 1
1902

RECEIVED
MAY 1
1902

RECEIVED
MAY 1
1902

EXAMPLE.

A man who had fallen out of a cart and broken his head, felt his consciousness deserting him when a light bandage was applied.

EXAMPLE.

A man received an accident on a ship and was unconscious for a month. He was then trepanned & he became conscious.

INFLUENCE
OF
BIRTH.

The health of the brain & mind is affected by birth. The condition of the mother during gestation has an effect. Strange shapes have happened to infants, from powerful impressions on mothers. Of 92 children, born after the blowing up of an arsenal, nearly all were deformed, or died early.

The character of a parent's mind is to be expected in offspring. Some families have great intelligence.

CAN OUR
RACE BE
ELEVATED?

How far it is possible to raise our race higher than it is, is an interesting question. Every now &

then, a great mind appears. The parents of such men have been generally not very marked.

EXCEPTIONS
TO
THE GENERAL
LAW.

They are exceptions to the law of descent just as idiots (the other extreme) are.

A perfect system of education and living, would raise us. Owing to imperfect hygiene & civilization we have caused the common mind to be below par. Periods, *Pericles, Alcibiades, Socrates, Plato, Aristotle, etc.* ^{typical}.

OUTCASTS
IN
LONDON.

We see melancholy examples of degeneration in all cities. Those who have studied London life, assert that there are hundreds who have inherited certain crimes for generations. They have language & customs unknown to the millions around them.

MENTAL
PECULIARITY
INHERITED.

There is a mental peculiarity inherited from parents. Insanity especially suicide is very often inherited. It often takes place when the tendency is unknown by the individual.

SUICIDE.

Alex Cruden, of the

"Concordance" - "hussy all his life"

John Howard, the great prison philanthropist, is
said to have been tyrannical in his own house.

The children of an insane person, may not get insanity, but some other brain disease. They may have epilepsy, or eccentricity.

ABSOLUTE SANITY.

Absolute sanity is seldom met. We have odd notions of some things. We have always something wrong.

MORAL ORGANISM.

The moral organization often suffers. This organism also is material. There are moral idiots.

It is impossible for some to do right.

ECCENTRICITIES.

We can often account for eccentricities from family traits. There are often family nuisances, intolerable at home.

ORGANIC DEFECT, THE CAUSE OF MORAL DEFECT.

Something is gained by recognizing an organic defect as the cause of moral defect. When a man, trusted, good & loved, runs off with money, we must recognize it.

BYRON.

Dr. Kay, says that Lord Byron was violent, capricious & bad. His father

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SAML. JOHNSON.

was called "Mad Jack Byron." His mother also had a violent temper. Saml. Johnson inherited something like madness. He would imagine he heard voices. He touched every post with his cane.

COWPER.

The sound & unsound is mixed in many; Cowper, for instance.

BRAIN OF
THE
CHILD.

Time of Life:- In the infant, there is no mental capacity. The brain improves gradually, 1st. the instinctive powers, 2nd. the emotional & 3rd. the intellectual. So we find the order of development of the brain to be, anterior, middle & posterior.

GREATEST
ENERGY.

The greatest energy is at full maturity. The brain grows till about 40. The father of Napoleon said that his head grew larger.

The brain retains its powers long after maturity.

YOUTH.

Youth is the time for poetry and art.

Christian Weierhaken of Lubeck, 18th century
 at 2 knew Bible history well — at 3 Latin thread. —
 at 4 was in Eccles. history — then died.

+ Only a preprint at 15

Paganini played
 wonderful on violin
 at 9

Mozart

precocious —
 composed music at 4

Liebig Unit, in love at 13,

Brown at an early age!

+ Victor Hugo,

a novel at 16

J. Vincent Raspail,
 Scientist & political agitator,
 delivered lectures on philosophy
 at 18, & on theology at 19.

Lord Shaftesbury declared ^{from} statistics,
 that much lower no. of criminals in England
 begin to be so by 16 yrs.

OLD AGE.

Formerly it was thought that old age gave wisdom of itself. This is not so, but old men have experience.

JUDGMENT.

The judgment is better under 70 than over 70. Lord Brougham outlived his powers of judgment. Some say that Danl. Webster did also.

FULL MATURITY.

Full maturity is from 30 to 50. There are some extremes. The following men were noted at early ages.

PRECOCIOUS MEN

(Genl. Halleck's work on Military Science states)

ALEX. THE GREAT,

Alexander the Great at 18

CAESAR,

Caesar, 22

Hannibal 26

HANNIBAL,

POMPEY,

Pompey, 25

Octavius

OCTAVIUS,

SCIPIO AFR.,

Scipio Africanus, 16

Ghengis Khan, 13

GHENGIS KHAN,

HEN. IV of France,

Henry IV of France, 16

Genl. Saxe, 12.

GENL. SAXE,

CORTES.

Peter the Great, 10.

Cortes, 36.

PETER THE GREAT,

CHAS. XII, Sweden,

Charles XII of Sweden, 15.

Pizarro, 35

NAPOLEON,

PIZARRO,

CHAS. FOX,

Napoleon I, 17.

Chas. Fox under 30

HAMILTON,

Alex. Hamilton, 13.

Wm. Bryant, 14

BRYANT,

LAMARTINE

Lamartine, 10.

Byron, 8.

BYRON,

DANTE.

in love - 13

in love -

End of 28th Lecture, 1867.

and Dante, ^{in love} 11. Lord Shaftesbury says that 49 out of 50 criminals begin in early life: from 8 to 16.

As a general rule, precocity is not a good sign. Overpushing of the brain causes early decay.

Among the great men who were not remarkable as boys, are:

Shakespeare (26)	Niebuhr
Moliere	Scott
Buffon Gibbon	Byron
Sheridan	Rittenhouse
Franklin	Clark
R. Sherman	Patrick Henry.
Davy.	

At 10, Adam Clark was a dunce.

Kent was fond of out-door sports.

The mother of ~~Barrow~~ ^{Isaac Barrow} used to say that if any of her sons was to die she hoped he would be the one. X

The other extreme is permanence.

Some examples are:

Plato, Sophocles, Cato, Socrates, Goethe, Humboldt, Titian, Benj. West, Cardinal Fleury, Richelieu,

GREAT MEN
NOT
REMARKABLE
AS
BOYS

SHAKESPEARE.
NIEBUHR
MOLIERE
SCOTT.
GIBBON
FRANKLIN
BYRON
RITTENHOUSE
SHERMAN
ADAM CLARK
DAVY.
PATRICK HENRY.
SHERIDAN.

PERMANENCE OF
POWER

PLATO
SOPHOCLES
CATO
SOCRATES
GOETHE
HUMBOLDT
TITIAN
BENJ. WEST.
CARD. FLEURY
" RICHELIEU

Haydon - '97

Poet Rogers, died at 93, after an accident.

Tiches - composing successfully

at 80. 1867
 Lord St. Leonards, 88, in 1869 made an honorable speech in Parliament.

Thiers - French historian, statesman,

Orator - (1869) 80 years old but a student still; it is said, just beginning the study of botany! 1871 - President of France - 1873, proposed a work on the origin of man.
 Duke of Saldanha - of Portugal, a military coup d'état, at 90! (1870)

Watt, principal inventor of steam engine, most of his life had ill health. F.W. Robertson the eloquent and noble president of Brighton, England - victim at last of over brain work.

Dr. Physick

delicate health
 French not philosopher from health
 Audubon

7 240 3 102 5 240 40 120

HANDEL
BEN JONSON
NEWTON
LOCKE
Saml. JOHNSON.
CHAUCER.
MANSFIELD.
PALMERSTON

Handel (75), Ben Jonson (63), Isaac Newton (84), Locke (73), Saml. Johnson (75), Chaucer (72), Mansfield (89), Humboldt (90), Palmerston (80).

PHYSICAL INFLUENCES

Health is affected by physical influences. 1. General:

ERRONEOUS IDEA.

It was formerly thought that a learned man is always unhealthy. Hygiene has dissipated this error.

ROBUST CONSTITUTION FAVORABLE.

A robust constitution is favorable to cerebral performance.

INVALIDS

CALVIN
POPE
COWPER
ROBT. HALL
KITTO
FULLER.

The following ~~men~~ of great minds were invalids: Calvin Pope, Cowper, Robt. Hall, Kitto, & Fuller. ~~Shelley, Mill, Darwin, Spencer~~ These are very few.

ROBUST

WASHINGTON
NAPOLEON
SCOTT
WILSON
NORTH
FRANKLIN
PALMERSTON.
LYNHURST.
BROUGHAM
CUIVIER
STEVENSON.

On the other hand, of robust health are Washington, Napoleon, Scott, Wilson (North), Franklin, Palmerston, Lynhurst, Brougham, Cuvier, Stevenson, Audubon.

This shows the absurdity of associating bad health with great minds.

240

$$\begin{array}{r} 7 \overline{) 238} \\ \underline{161} \\ 77 \\ \underline{77} \\ 00 \end{array}$$

$$\begin{array}{r} 8 \overline{) 240} \\ \underline{160} \\ 80 \\ \underline{80} \\ 00 \end{array}$$

217.50
67.50

150.00

